

NEW SPECIES OF ELASMUS FROM AUSTRALIA

(Hymenoptera, Elasmidæ)

By A. A. GIRAULT

Elasmus pavo, new species.

Like *flavipostscutellum*, but postscutellum black at base, abdomen orange but margined down sides for a bit over proximal half except for a space at proximal one-eighth; also distal fourth above metallic save (sometimes) for a very narrow orange stripe near tip. Mandibles 6-dentate. Scape pale. Head punctures rather sparse. Pedicel rather long, equal to funicle 3, funicle 1 twice longer than wide.

Gordonvale, Queensland, forest, July 9, 1918. Also Aloomba, July 10. Also Brisbane, November, 1916 (H. Hacker).

Elasmus kulabaga, new species.

Like *divinus*, but abdomen wholly metallic, the distinct infuscation of the fore wing is uniform and over distal fourth. Mandibles 7-dentate. Head punctures tolerably dense. Scape pale. Funicle 1 twice longer than wide. Also first leg pale save femur above, coxa at base; 2 and 3 green save apex of coxæ, base of femora and the tibiæ. Postscutellum all yellow.

From canes, Nelson, October, 1915 (A. P. Dodd).

Elasmus nakomara, new species.

Like *formosus*, but propodeum all metallic, upper edge hind coxæ so, the mandibles only 5-dentate. Funicle 1 thrice longer than wide.

Brisbane, June (H. Hacker).

Elasmus arumburinga, new species.

Like *formosus*, but pronotum widely black to scutum's middle, then rest of scutum metallic and distal two-thirds parapsides, this metallic acute on its cephalic end, a dot under tegula, all of propodeum save latero-caudal margin. Mandibles 6-dentate. Cephalic margin scutellum narrowly metallic. Head densely punctate, also upper edge hind coxa.

Samford, near Brisbane, May, 1916 (H. Hacker). From *Leptospermum*.

Elasmus ero, new species.

Like *shellyi* but scape concolorous, the distal metallic of abdomen is divided by a narrow orange cross-stripe very near its proximal ends. Femora white at apex.

Brisbane, October (H. Hacker).

Elasmus inkaka, new species.

Like *flavipostscutellum* but orange part of abdomen with three narrow cross-stripes, funicle 1 cup-shaped, shorter than pedicel, 2 twice wider than long, hind coxa with only dorsal sixth metallic. Orange of abdomen longer than distal metallic.

Two females, Gordonvale, forest, July.

Elasmus centaurus, new species.

Orange, the head green save triangularly from mouth up to antennæ (including lower edge of cheek), densely punctate. Green: Pronotum (nearly to hind margin at meson but the hind margin of green convex, thus recedes behind further and further, leaving wider yellow), axillæ, tegulæ save base at apex, scutellum, scutum behind in the form of a blunt cone one-third way up meson, mesopleurum (save prepectus), pedicel, funicle and club, postscutellum conically toward middle and extreme apex, propodeum, metapleurum, upper sixth hind coxa widely centrally, proximal fourth, distal third of abdomen above, the intermediate orange nearly equal the distal metallic. Distad, upper edge of hind femur metallic. Wings subhyaline, setæ of hind tibiæ in sagittate areas. Funicles much longer than wide. Mandibles 5-dentate.

Jungle, Mount Sophia, June. Also at Gordonvale, jungle, in late August.

Elasmus burnsi, new species.

Robust. Runs to *lividus* but scape dusky save two-thirds beneath toward base, first legs save coxa at extreme base, knees, base hind femur, all tibiæ and tarsi pale. Abdomen red

at basal third beneath, postscutellum lemon at distal half. Mandibles 6-dentate. Head densely punctate. Funicles equal, longer than wide. First femur black above at basal two-thirds. An elongate species. Hind coxa all black.

Sydney, New South Wales, forest, October, 1917. Also at Gordonvale, bed of Mulgrave River, August, 1918.

Elasmus voltairei, new species.

Runs to *australiensis* but mandibles 6-7 dentate, coxa 2 green at basal half, all of coxa 3 so, while femur 3 has a broken, rather wide green stripe obliquely cross a bit distad of middle, this stripe broken or interrupted at its middle; basal half of abdomen beneath red. Head densely punctate. Scape dark along dorsal edge. Base of tegulæ lemon, also a cuneate spot between it and axilla. Postscutellum lemon save at base.

Sydney, forest, October, 1917.

Elasmus dumasi, new species.

Like *flavipostscutellum* but above nearly distal two-thirds (distal half below) of abdomen black, the orange part only half this or less and twice the basal green. Also the tegulæ are yellow.

Gordonvale, forest, March.

Elasmus shellyi, new species.

Like male *cyaneicoca* but scape pale, orange of abdomen exceeds by a third the distal metallic (distal third), four times the basal (basal eighth); fore femur black along dorsal edge. Mandibles 6-dentate.

Cairns, forest, July 5, 1918.

Elasmus silvensis, new species.

Like *kurandaensis* but cephalic half scutum metallic save extreme cephalo-lateral corner, cephalic half parapside metallic, dot on meson of scutum, hind margin; scutellum margined all around with yellow, the distal stripe of abdomen is not as long as the distal green, there is a still narrower cross-stripe at over proximal third and across middle four dots,

two on each side meson. Mandibles 6-dentate. Also the mesopleural area is narrowly separated from most of the metallic metapleura hence does not go to hind coxa.

Gordonvale, July 8, 1918, forest.

Elasmus maculatipennis rex, new variety.

Like the typical form but four marginal dots on abdomen, the first round and smallest, the others transverse but not joined (8 in all).

Nelson, forest, August.

Elasmus regina, new species.

Like *burnsi* but segments 2-4 of abdomen red at ventro-lateral halves (or more as regards 2) and 2 red cross apex above. Scape pale. Postscutellum all lemon, wings hyaline. Femur 2 and 3 not pale at apex and abdomen is narrower. The body is less robust, the hind wings distinctly narrower and less knife-shaped.

Two females, jungle, Aloomba; August, Mulgrave River.

Elasmus shellyi geminus, new variety.

Like *shellyi* but abdomen above with 7-8 green, and base of 6, besides the base of 2, so there is a cross-stripe before the distal green. Also leg 1 all pale. Head densely punctate. Mandibles 5-dentate.

One female, Gordonvale, forest, August.

Elasmus joulei, new species.

Like *aquila* but femora less widely pale at base, coxa 3 less so at apex, scape pale, abdomen green equals 5-8 above, basal half of 2, a narrow cross-stripe following this but not reaching lateral margin, apex of 2 and 3 save at lateral margin. Mandible 6-dentate.

One female, Pt. Douglas, grass on salt pan, September.

Elasmus pretiosus, new species.

Like *fasciatipes* but cross-stripe on femur 2 distinctly broken between middle and hind margin, half smaller is the body and abdomen green is basal third of 2, 4-8 and a mark cross middle of 3. Coxa 1 pale save at base.

Babinda, September, jungle.

Elasmus un fasciativentris, new species.

Like *taurus* but abdomen green: basal third of 2, 6-8 and a very distinct narrow stripe across base of 5. Mandibles 5-dentate. Head densely punctate.

Babinda, September, jungle.

Elasmus nympha, new species.

Like *fasciatiipes* but femur 2 aeneous save at each end, first legs pale, abdomen green basal half of 2, transverse marginal spot base and apex of 3, cross-stripes cross base of 5 and 6, all 7-8. A streak of yellow runs along femur 2 near caudal margin, dividing the green. A lemon spot between tegula and axilla. Scutellum with a lemon stripe cross it very near base. Tegulæ lemon.

Jungle, Mulgrave River, November.

Elasmus apus, new species.

Head green save occiput and face up to eyes or nearly (as to face). Tegulæ, axillæ and space between, meson of propodeum, a dot off middle scutellum on dorsal thorax, middle of dorsal margin of coxa 3 more or less, flagellum, 8 of abdomen and basal two-third 7, black. Mandibles 6-dentate.

Forest, Nelson, April.

Elasmus picturatus mus, new variety.

Like type but a dot at margin of abdomen, apex segments 3 and 4 and a spot at dorsal meson of 8, centrally.

Forest, Gordonvale, August, blady grass, 2 females.

Elasmus perdubius, new species.

Like *pulexoides* but stripes on abdomen closer together and differently disposed and there is a transverse marginal spot at apex of 2; the stripes are: Apex 3, distal half of 4, distal two-thirds 5 and all of 6 save extreme base; 7 and 8 are green. Stripe 1 is farther from the basal green than in the named species. Hind coxæ and femora pale at apex and base respectively.

Gordonvale, blady grass, August 15, 1918 (Mandibles not seen).

Elasmus helena, new species.

Like *lyra* but much smaller and basal half abdomen 2 green, pronotum less green, propodeum all green.

Jungle, Babinda, September.

Elasmus ignorabilis bellus, new variety.

Like typical form but wing with a distinct, long oblique stripe from stigmal vein as in *divinus*, the apex of abdomen 6 above is narrowly orange, while black along the middle of side of abdomen 5 connects the black apex of 5 with the black upper sides of 3 and 4. Scape dusky at apex. Postscutellum entirely lemon. Tegulæ metallic.

Jungle along Mulgrave River, Gordonvale, December.

Elasmus nanja, new species.

Like *pallidicornis* but flagellum dark, funicles half longer than wide, exceeding pedicel, mandibles 7-dentate, abdomen red at base beneath, postscutellum yellow at tip, distal third femur 1, tibiæ 1 and 3 pale. Scape concolorous.

Brisbane, herbage, June, 1913 (H. Hacker).

Elasmus grimmi, new species.

Like *trifasciiventris* but abdomen orange save somewhat over distal third and narrowly at base above and margins at base. Coxa 1 nearly all pale. Head punctate. Orange of abdomen subequal to distal metallic.

From cane, April, September, 1915 (A. P. Dodd).

Elasmus cygnus, new species.

Like *stellatus* but upper half occiput black except dorso-laterad, the black joined to the ocellar spot; about half pronotum metallic, the area on mesopleurum is quadrate, still isolated, the mesopleurum is metallic, no dot on parapside nor spot on distal abdomen, entire propodeum metallic. Mandibles 6-dentate.

Gordonvale, July 29, blady grass.

Elasmus io, new species.

Like *flavinotus* but mandibles 7-dentate, basal half hind femur pale, abdomen above metallic, save distal margins segments 2-5, with *cygnus*.

Elasmus virgo, new species.

Like *margiscutellum* but scape, legs pale, a minute yellow dot between yellow tegula and the axilla, mandibles 6-dentate, club with a distinct spicule, abdomen with basal seventh, distal third save narrow cross stripe near tip and three incomplete cross-stripes between, 1 at apex of segment 2, others at same of 3 and 4.

Forest, Gordonvale, August 9, 1918.

A NEW SPECIES OF LEPIDIOTA FROM NORTHERN QUEENSLAND

(*Coleoptera, Scarabaeidae*)

BY A. A. GIRAULT

Lepidiota consobrina, new species.

Female: Like *frenchi* with which compared but somewhat larger; dorsal prothorax and base of elytron very dark brown, these shading into reddish, thus not uniform; joints 6-7 of male antenna shorter than same in female, also club larger in proportion; teeth on outer edge of front tibia obtuse and not equidistant; scaliness on venter of abdomen 2-5 much narrower widely across meson, in the middle segments not nearly covering the segment.

In the larva, the path or naked area on the distal venter is not ovate and closed but flask-shaped and open cephalad; also the head is wider. The elytral scales of the two species differ in shape.

Messrs. Edmund Jarvis and A. P. Dodd first pointed out the above characteristics of this species (see Bureau Sugar Experiment Stations of Queensland, Bulletins Nos. 5 and 6, their No. 683). Type in Queensland Museum.